
ANNUAL REPORT ON THE ENVIRONMENT

CHAPTER VI

**ECOLOGICAL
RESOURCES**

VI. ECOLOGICAL RESOURCES

This chapter summarizes the status of ecological resources and the actions of public agencies and citizen groups in the management and preservation of these resources.

A. ISSUES AND OVERVIEW

Open space and natural habitat continue to be reduced in Fairfax County, primarily because of development (both residential housing and commercial buildings) and road building. As this resource is reduced, increased emphasis must be placed on protecting, preserving, and enhancing the remaining open space and natural habitat in Fairfax County.

Fairfax County contains a total of 227,788 acres (excluding roads, water, and small areas unable to be zoned or developed). Of this total, about 27,100 acres (11.9%) are in parks and recreation as of January, 2003. Another approximately 26,700 acres (11.7%) are vacant or in natural uses. However, not all this acreage can be considered as open space that is valuable for natural habitat. First, the park acreage consists of active recreation (ball fields, etc.) as well as passive recreation (stream valley parks, nature centers, etc.). Ball fields, while greatly needed in Fairfax County, do not do much for protecting natural habitat. In a like fashion, much private open space consists of mowed areas and isolated trees (not woodlands). Again, this does little for protecting natural habitat. Both active recreation areas and private open space, however, can help the environment by reducing storm water runoff (by allowing storm water to infiltrate into the soil).

Second, while vacant land is often wooded, this land is subject to development. Considering the continuing rapid pace of development in Fairfax County, much of this land will soon become residential space, office space, retail space, etc., and not provide much in the way of protecting natural habitat.

Therefore, Fairfax County needs to undertake stronger efforts in order to protect, preserve, and enhance the environmentally sensitive open space in the county. These efforts include the establishment of a countywide Natural Resource Inventory, followed by a countywide Natural Resource Management Plan. Additionally, the county needs an aggressive program seeking easements on privately owned environmentally sensitive land and, as opportunities arise, to purchase environmentally sensitive land.

Two significant efforts have occurred that should help in the county's preservation and protection of natural resources. First, the Fairfax County Board of Supervisors adopted an environmental vision for Fairfax County – *Environmental Excellence for Fairfax County: a 20-Year Vision*. This vision cuts across all activities in Fairfax

County and outlines guidelines that hopefully will be followed in future planning and zoning activities in Fairfax County.

Second, the Park Authority approved the Natural Resource Management Plan for park properties. Again, if this plan is implemented, improved preservation and protection of environmentally sensitive land should be the result.

EQAC continues to commend a number of organizations for their activities in protection, preservation, and enhancement of environmentally sensitive areas. These organizations include: the Northern Virginia Soil and Water Conservation District, the Virginia Department of Forestry, the Northern Virginia Conservation Trust, Fairfax ReLeaf, and the Fairfax County Park Authority and its staff.

B. PROGRAMS, PROJECTS, AND ANALYSES

1. The Fairfax County Board of Supervisors

In past years, this chapter of the Annual Report mentioned various organizations and programs supporting environmental efforts in Fairfax County. However, the Fairfax County Board of Supervisors, while mentioned many times, did not have a section in this chapter. The actions and decisions of the Fairfax County Board of Supervisors (BOS) do affect the county's natural resources. These actions and decisions include land use planning and zoning, transportation planning, allocation of staff resources, etc. The BOS has enacted a number of policies that do benefit the environment and many of these policies are embedded in county ordinances and the Policy Plan. However, there never has been an overarching vision dealing with the environment. This has now changed. The BOS has now adopted such an overarching vision -- *Environmental Excellence for Fairfax County: a 20-Year Vision*.

This vision is organized into six sections that cut across all areas in the county:

- Growth and Land Use;
- Air Quality and Transportation;
- Water Quality;
- Solid Waste;
- Parks, Trails, and Open Space; and
- Environmental Stewardship.

Some recommendations in this document that impact ecological resources include:

- Create more community parks for active and passive recreation – open spaces with native vegetation to sustain local wildlife and to create areas for walking, meditating, or bird watching;
- Continue to acquire open space before it is too late through direct purchase or conservation easements to create more trails, connect trails and provide passive and active recreation areas;
- Provide adequate resources to maintain and appropriately develop our parks for passive and active recreation;
- Encourage conservation easements for open space and trails either to private organizations, such as the Northern Virginia Conservation Trust and The Potomac Conservancy, or to government agencies like the Fairfax County Park Authority or the Northern Virginia Regional Park Authority;
- Encourage organizations, for example, those that work on stream monitoring and stream valley restoration, to involve schools and citizens of all ages in their work;
- Encourage citizen-based watershed stewardship groups and help them to work with all stakeholders to protect, enhance and improve the natural resources, and hence, the quality of life in their watersheds; and
- Establish an aggressive program of community groups to adopt natural areas such as parks, trails, and stream valleys.

The complete document can be viewed at:

http://www.co.fairfax.va.us/dpwes/environmental/env_excel.htm.

This document is very significant in its potential for protection, preservation, and restoration of the county's natural resources. EQAC commends the Board of Supervisors for adopting this vision and looks forward to the implementation of the recommendations.

2. Fairfax County Park Authority

The Fairfax County Board of Supervisors created the Fairfax County Park Authority (FCPA) in 1950, authorizing the Park Authority Board to make decisions concerning land acquisition, park development, and operations. As a

result, Fairfax County has a system of parks that serve a number of uses, including active recreation such as sports, historic sites and buildings, and preservation of environmentally sensitive areas such as forests and stream valley lands. For current information on the county's parks, visit the FCPA Web site at <http://www.fairfaxcounty.gov/parks/>.

a. Acquisition of Park Land by FCPA

The FCPA added approximately 1,171 acres in FY 2003. This brings the parkland inventory to a total of 22,908 acres. Included in this acreage is the partial transfer of the Laurel Hill property (the former Lorton Prison) from the Board of Supervisors. This singular action resulted in the acquisition of 867 acres – the largest transfer of land from the Board of Supervisors to the Park Authority.

b. Natural Resource Management Plan

In past reports, EQAC recommended that the county Board of Supervisors develop and implement a countywide Natural Resource Management Plan. EQAC noted that in order to do this, two tasks need to be accomplished first: complete a countywide Baseline Natural Resource Inventory and adopt a unified Natural Resource Conservation Policy.

EQAC's past recommendation on developing a countywide Natural Resource Management Plan has been partially fulfilled by FCPA. On January 14, 2004, the Park Authority Board approved the Natural Resource Management Plan (NRMP) for Park Authority property. The NRMP contains seven elements:

- Natural Resource Management Planning;
- Vegetation;
- Wildlife;
- Water Resources;
- Air Quality;
- Human Impact of Parklands; and
- Education.

The complete NRMP can be viewed at:
<http://www.fairfaxcounty.gov/parks/nrmp.htm>.

The first year of the implementation of the NRMP started July 1, 2004. However, the existing Natural Resource Management and Protection Section of the Park Authority staff will do the implementation of the plan. This is three people. While some park sites and partners will also assist in implementation, these three people are not adequate to get this plan

underway, especially considering that the Section has other duties and that no additional funds are available. For example, the plan needs to flow down to individual parks. Inventories for individual parks need to be done; however, inventories will occur only as needed as a result of planned development and as funding allows. Furthermore, site specific NRMPs will not occur for un-staffed parks.

The development of a site specific NRMP is taking place at Riverbend Park. Riverbend Park is working with The Nature Conservancy (along with the Natural Resource Management and Protection Section at Park Authority headquarters) to write a NRMP for the park using The Nature Conservancy's resource planning framework. This planning effort can serve as a pilot project that may be used as a model for creating plans for other parks.

While the Park Authority has made a great step forward with the adoption of the NRMP, more resources (people and funds) need to be devoted to the implementation of the plan. Furthermore, inventories of all parks need to be accomplished. The inventory needs to be extended to cover all of Fairfax County so that future planning for acquisition of sensitive lands can take place.

c. Greenways Program

Implementation of the Greenways Program began in 1997 with the Park Authority staff working with citizens groups participating in the Parks Round Table partnership. Unfortunately, the Park Authority staff stopped supporting the Round Table and the Parks Round Table lapsed. The Greenways concept is furthered through the county Comprehensive Plan, and through Park Authority policy, to "identify, protect, and enhance an integrated network of ecologically valuable land and surface waters for present and future residents of Fairfax County." FCPA helps accomplish this goal through the acquisition of land for Stream Valley Parks, and the development of a comprehensive trail network.

As is the case with Environmental Quality Corridors (EQCs), the ecological boundaries of Greenways may include both public and private open space. Under voluntary cooperative resource management agreements, the Park Authority could offer technical assistance for enhancing the Greenway benefits of private property. This could include the landowner voluntarily granting conservation easements. Groups such as The Nature Conservancy have used conservation easements successfully to protect environmentally sensitive lands, and The Nature Conservancy has found that many landowners support the goal of preserving these environmentally sensitive lands.

EQAC notes that the Greenways Program is valuable in that it can expand the protection of environmentally sensitive stream valleys. However, this program should be aggressively expanded through the use of obtaining conservation easements, where possible, on private properties. As noted above, The Nature Conservancy has been successful in this approach. Additionally, the Northern Virginia Conservation Trust (NVCT) has now obtained a number of easements in Northern Virginia, showing that this approach in Fairfax County is feasible. The Board of Supervisors should continue its cooperation with NVCT and aggressively pursue easements aimed at protecting and preserving environmentally sensitive lands.

The Greenways Program did move forward in 2003 with the acquisition of about 277 acres of stream valley land in 12 purchases, dedications, and transfers. These included:

- Kingstowne Park – 76.9 acres of stream valleys, ponds, and wetland mitigation areas adjoining the Piney Run Stream Valley. This is co-owned with the county.
- Laurel Hill – 867.1 acres of which about 100 acres are in the Giles Run Stream Valley;
- Horne Property – 238.1 acres of which about 50 acres are in the Bull Run watershed.
- Thomas-Brodie Property – 16.7 acres in the Difficult Run Stream Valley.

d. Invasive Plant Control Efforts

Invasive plants are a problem because they can out compete and replace native species. This change in vegetation disrupts the life cycles of many flora and fauna that depend on native vegetation. The Park Authority's Strategic Plan includes a strategy to develop invasive plant guidelines for consideration by the Environmental Coordinating Committee as a countywide standard. Invasives projects occur at staffed parks and in select parks when volunteers can assist in the efforts. While EQAC commends the volunteers and the Park Authority staff who are cooperating in removing invasives, an increased effort should be established using dedicated funds for this purpose.

One such project involving volunteers is the adoption of the Marie Butler Leven Preserve by a non-profit organization (Earth Sangha). Earth Sangha will demonstrate invasives removal and the use of native plants and trees at this preserve.

Examples of invasives control projects at staffed sites include Riverbend Park and Ellanor C. Lawrence Park. Riverbend Park is in the beginning of a

partnership with the Potomac Conservancy and The Nature Conservancy to bring volunteers to Riverbend and Scott's Run Nature Preserve to assist with the control of invasive species. This relationship began in May, 2004, when the Potomac Conservancy brought a group of Americorps volunteers to Riverbend for one week to eradicate invasives in the meadow and to construct a new trail.

At Ellanor C. Lawrence Park, site staff combated exotic plants through cutting and spraying. These plants included *Microstegium*, autumn olive, and oriental bittersweet.

e. Riparian and Bioengineering Projects

The Fairfax County Park Authority, along with and in partnership with other agencies, continues to work on stream stabilization/bioengineering projects. See the Water Resources Chapter of this report for descriptions of these projects.

f. Fairfax County Park Foundation

Fairfax County citizens can donate to the Fairfax County parks through the Fairfax County Park Foundation. The Fairfax County Park Foundation is a 501(c)(3) not-for-profit organization and donations are tax deductible to the fullest extent allowed by law. The Foundation's mission is to raise funds to support the parks and land under the stewardship of the Fairfax County Park Authority. Less than half of the Park Authority's annual operating funds come from tax support. The Foundation's goal is to bridge the gap between income from tax support and user fees, and the cost to operate, maintain and preserve our park system. If you are interested in giving a tax-deductible donation to the Foundation, contact them at:

Fairfax County Park Foundation
12055 Government Center Parkway
Fairfax, VA 22035
(703) 324-8581
SupportParks@aol.com
<http://www.FairfaxCountyParkFoundation.com>

3. Northern Virginia Regional Park Authority

Three Northern Virginia Counties (Fairfax, Loudoun, and Arlington) and three cities (Alexandria, Fairfax, and Falls Church) participate in the Northern Virginia Regional Park Authority (NVRPA). NVRPA was founded in 1959 and

owns and operates 19 regional parks and owns 10,256 acres of land throughout the region.

The NVRPA often partners with other organizations to meet its mission of caring for the environment, overseeing urban forestland, protecting water resources, and preserving land for future generations. Some of these activities in 2003 included:

- U.S. Bureau of Land Management “Public Lands Appreciation Day” projects at Pohick Bay and the Washington and Old Dominion (W&OD) Trail;
- National Audubon Society’s annual bird counts at Bull Run and at Pohick Bay;
- Friends of the Occoquan and Chesapeake Bay Restoration Fund-sponsored Occoquan River Semi-Annual Cleanup Days at Occoquan, Fountainhead, and Bull Run Marina;
- Alice Ferguson Foundation 15th Annual Potomac Watershed Cleanup Day at Pohick Bay;
- Virginia Division of Soil and Water Conservation’s Urban Nutrient Management Program at NVRPA golf courses and athletic fields; and
- 3,000 native species tree planting project by volunteers along two and a half miles of the W&OD Trail.

Current information about the Northern Virginia Regional Park Authority can be found on its Web site: <http://www.nvrpa.org/>.

4. Fairfax ReLeaf

Fairfax ReLeaf is a non-profit (501(c)(3)), non-governmental organization of private volunteers who plant and preserve trees, restore habitat, and improve community appearance in Northern Virginia. They have testified to county officials and politicians that an unacceptably rapid rate of tree loss in Fairfax County continues. They state that the county has not taken effective steps to stem this loss of forest infrastructure. They are very active in tree plantings and are always eager to sign up new volunteers.

Fairfax ReLeaf remains very active in its efforts. For example, during fall, 2003, the organization worked with the following individuals/groups:

- Eagle Scout Sean Milligan improved the Difficult Run Stream Valley Park with 134 seedlings, consisting of a mix of bald cypress, buttonbush, red maple, river birch sycamore, willow oak, and 20 black willow stakes;
- Cox Cable and Home Stretch each sent a large group of volunteers to mulch and prune at the West Ox Transfer Station to give the small trees on the closed landfill a better chance of survival;
- The George Mason Women's Track & Cross Country team and STRIVE worked up and down the grass covered mound at Braddock Road and Fairfax County Parkway, planting, mulching, and protecting 143 trees;
- Several Boy Scout groups continued to support ReLeaf plantings at Rolling Road, Crossfield, and Old Creeke Elementary Schools;
- Girl Scouts assisted the Centreville Beautification Committee at a planting at Routes 28 and 29; and
- Tree Commissioners Laura Hoy and Debbie Foster both initiated and assisted with plantings in their Districts (Springfield and Sully).

For further information on Fairfax ReLeaf, visit its Web site at <http://www.geocities.com/RainForest/5663>. Fairfax ReLeaf can be reached at:

Fairfax ReLeaf
12055 Government Center Parkway
Suite 703
Fairfax, VA 22035
Telephone: (703) 324-1409
Fax: (703) 631-2196
Email: trees@fairfaxreleaf.org

5. Northern Virginia Conservation Trust

Past EQAC reports have recommended that the Fairfax County Board of Supervisors form public-private partnerships for the purpose of obtaining easements on environmentally sensitive land. EQAC pointed out that entities such as The Nature Conservancy use easements very successfully as a way of protecting environmentally sensitive properties. With the signing of a Memorandum of Understanding on June 20, 2001 between the Fairfax County Board of Supervisors and the Northern Virginia Conservation Trust (NVCT), such a public-private partnership now exists.

The Northern Virginia Conservation Trust (NVCT) was founded in 1994 as the Fairfax Land Preservation Trust. In 1999, it changed its name to The Northern Virginia Conservation Trust to better reflect the regional scope of the organization. NVCT is a 501(c)(3) nonprofit land trust dedicated to preserving and enhancing the natural and historic resources of Northern Virginia. NVCT also has formed public-private partnership with Arlington County and owns properties and/or easements in Arlington, Fairfax, Loudoun, Prince William, and Stafford Counties.

From the time NVCT accepted its first easement in 1999 through June 2004, NVCT has preserved 512 acres of open space in Fairfax County through easements, fee simple ownership, and partnerships. Table VI-1 shows the extent of these activities, many of which offer protection to stream valleys.

NVCT also has a public outreach program – Adventures in Conservation – to bring hands-on volunteerism and environmental education opportunities. These activities included the planting of over 1,500 native trees, the removal of tons of invasive plants, birding trips, and guided hikes.

EQAC encourages all landowners whose property contains environmentally sensitive land such as wetlands, stream valleys, and forests to consider contacting NVCT and learning more about easements. If these landowners grant an easement, they will not only protect sensitive land, but can realize some financial benefits. A perpetual easement donation that provides public benefit by permanently protecting important natural, scenic, and historic resources may qualify as a Federal tax-deductible charitable donation. Under the Virginia Land Conservation Act of 1999, qualifying perpetual easements donated after January 1, 2000 may enable the owner to use a portion of the value of that gift as a state income tax credit. Fairfax County real estate taxes could also be reduced if the easement lowers the market value of the property.

Additional information on NVCT can be found on its Web site at:
<http://www.nvct.org>.

Table VI-1 Fairfax County Open Space Preserved Through NVCT Efforts				
Date	Name	District	Acres	Type
Dec 1999	Haldane Easement	Dranesville	4.2	One easement
Apr 2000	Ruckstuhl Easement	Providence	7	Four easements
Aug 2000	Davenport/Pimmit Run	Dranesville	1	Fee simple ownership
Dec 2000	Narins Easement	Dranesville	5	One easement
Dec 2000	Bliss Easement	Dranesville	5.6	One easement
May 2001	Elklick Woodland Preserve*	Sully	384	Grant funds for acquisition
Jul 2001	Rentsch Easement	Dranesville	5	One easement
Jul 2001	Cobb Easement	Dranesville	12	One easement
Aug 2001	Thornton Easement	Dranesville	5	One easement
Aug 2001	Lindsay Easement	Dranesville	5	One easement
Jan 2002	Backlick Run	Braddock	0.6	Fee simple ownership
Mar 2002	Little Hunting Creek	Mt. Vernon	2	Fee simple ownership
May 2002	Geschicter Easement	Mt. Vernon	34	One easement
Aug 2002	Solarz Easement	Dranesville	6	One easement
Dec 2002	Hanley I Easement	Lee	0.8	One easement
Dec 2002	Hanley II Easement	Lee	0.8	One easement
Dec 2002	Greenspring/Evans	Mason	1.58	One easement
Mar 2003	Sloan Easement	Hunter Mill	0.364	One easement
Apr 2003	Thompson House	Sully	1.56	One easement
May 2003	CBA Easement	Springfield	5.5	One easement
Jun 2003	Laughlin I Easement	Mt. Vernon	0.407	One easement
Jun 2003	Laughlin II Easement	Mt. Vernon	0.92	One easement
Jun 2003	Cobb II Easement	Dranesville	2.377	Easement amendment
Jun 2003	Gilliam/Clifton	Springfield	8.66	Fee simple ownership
Dec 2003	Ryan Easement	Mt. Vernon	9	One easement
Apr 2004	Hauge Easement	Mason	0.75	One easement
May 2004	Oak Hill Easement	Braddock	2.8	One easement
	Total Acres		512	

*Note: The Elklick Woodland Preserve includes two parcels of land purchased by the Fairfax County Park Authority with funds from an NVCT grant. An easement to NVCT has been recorded on 226 acres.

Source: *Spreadsheet of NVCT Fairfax Properties*, E-mail from Paul Gilbert, NVCT President, to Robert McLaren, August 16, 2004.

6. Northern Virginia Soil and Water Conservation District

The Northern Virginia Soil and Water Conservation District (NVSWCD) continues to provide leadership in the area of bioengineering techniques in streambank stabilization and in the general area of erosion and stormwater control. They work in partnerships with other agencies and organizations. For example, they have partnered with the Fairfax County Park Authority, Virginia Department of Forestry (VDOF), the Fairfax County Department of Public Works and Environmental Services, and the Reston Association. See the Water Resources Chapter in this report for descriptions of stream stabilization/bioengineering projects for which NVSWCD has provided leadership.

NVSWCD's annual seedling program emphasizes the role of vegetation in preventing erosion, conserving energy, and decreasing and filtering stormwater runoff. Those planted in riparian areas also help to protect stream channel stability and stream water quality, as well as improving the surrounding habitat. The 2003 seedling program offered citizens a "sun and shade" package of 14 native tree and shrub seedlings for a small cost. NVSWCD sold 412 packages in the 2003 program.

a. Fairfax County Soil Survey

Fairfax County used to have soil scientists on the staff, but in a budget cut several years ago, the office was abolished. In past Annual Reports, EQAC deplored this move and recommended that soil scientist expertise be brought back to the county staff. While the Board of Supervisors did not exactly follow this recommendation, it did satisfy the intent of EQAC's recommendation by funding NVSWCD to finish the county's soil survey. The funding for this became available to NVSWCD in Fiscal Year 2004 and will continue through Fiscal Year 2007. The field surveys will be complete in 2007, and the final reports and maps will be available in 2008.

NVSWCD is working with the Natural Resources Conservation Service (NRCS) in accomplishing the update of the Fairfax County soil survey. NVSWCD funds NRCS for this assistance (about \$110,000 per year) with some of the monies provided by the Board of Supervisors. NRCS matches the funds provided, thereby leveraging the funds provided by the Board of Supervisors.

The Fairfax County soil survey update will modernize an existing soil survey. The update will enable the GIS system to use the soil survey information (a capability that did not exist). As a result, this update will enable planners, individuals, scientists, and anyone involved in land use

planning to make smart land use decisions that will work to save money and conserve valuable natural resources.

The resulting database and maps will incorporate the new information and scientific knowledge acquired about soils in the last 30 years. However, the updated maps will not eliminate the need for site-specific surveys when construction or changes in site use occur. The maps will better describe, characterize, and define the properties of the soil components within existing delineations. The map will also show that inclusions of other soil types can exist, but will not show the extent of smaller inclusions. Site-specific surveys will be need for this fine detail.

One new effort that is being done under the soil survey is the characterization of man-made soils (urban soils). The characteristics of urban soils can be quite different from native soils. One significant difference is the ability of water to infiltrate urban soils (much less than many native soils). Knowing where urban soils exist and the type of urban soil can be critical to stormwater control efforts that incorporate infiltration of water (rain gardens, grassy swales, etc.).

In a similar fashion, neighboring counties are updating their soil maps. Loudoun County updated its soil maps and incorporated those data into its GIS system. Loudoun County, however, recognizes that the soils map needs to be continuously updated (based on field site inspections) and has a county Soil Scientist to provide site-specific soil interpretations. In a like fashion, Fauquier County has also updated its soil survey and incorporated that data into its GIS. Fauquier County also has a county Soil Scientist Office to provide site-specific information.

Fairfax County also needs to maintain expertise in soils. At present, funding for the expertise will end after Fiscal Year 2007. However, the GIS maps will need to be maintained and updated, and this cannot be done without the appropriate expertise. Furthermore, expertise will be needed to interpret site-specific surveys. Without this expertise, problems will likely develop as uses are changed on sites. In addition, detailed knowledge of soils will be critical to future stormwater control efforts as well as other activities. One just needs to look at the recent slope failure on the newly widened Telegraph Road to see the importance of knowing soils and their characteristics. In this case, the failure of the slope due to clay soils jeopardized houses on the top of the hill. EQAC therefore recommends that the Board of Supervisors continue to fund soil scientist expertise past Fiscal Year 2007.

7. Fairfax County Wetlands Board

If you own property on the waterfront in Fairfax County, you may need a permit before you build or make improvements on your property. These activities, known as land disturbing activities, often require a permit if done in an area that has been identified as a tidal wetlands. Land disturbing activities include the following:

- Any construction project on or adjacent to a tidal body of water;
- Any construction project in which fill material is placed in or near wetlands;
- Construction of bridges, tunnels or roads which may have an impact on wetlands, either tidal or non-tidal; or
- Projects designed to protect property adjacent to shorelines

For further information contact the Wetlands Board at:

Fairfax County Wetlands Board Staff
Department of Planning and Zoning, Planning Division
12055 Government Center Parkway, Suite 730
Fairfax, VA 22035-5504
(703) 324-1210
<http://www.co.fairfax.va.us/dpz/environment/wetlands.htm>

8. Virginia Department of Forestry

The Virginia Department of Forestry (VDOF) has provided forestry related services in Fairfax County for over 30 years. VDOF is also participating in several efforts aimed at improving riparian zones and stream bank stabilization projects. In these efforts, VDOF partnered with the Northern Virginia Soil and Water Conservation District, the Department of Public Works and Environmental Services, and the Reston Association. See the Water Resources Chapter in this report for further details. Also, see the Water Resources Chapter for details on VDOF riparian buffer reforestation efforts.

9. Virginia Department of Transportation

Unavoidable impacts to water resources with Fairfax County that occur during highway construction projects are mitigated as required by federal and state laws and regulations. The Virginia Department of Transportation (VDOT) is currently monitoring two wetland mitigation projects within Fairfax County.

- In the Dranesville District, VDOT created a wetland project along Dranesville Road near Sugarland Run to mitigate for construction

impacts from the Fairfax County Parkway. The site was planted in fall, 2002 and is currently being monitored for five years. The first year results from the monitoring show impressive results.

- In the Braddock District, VDOT constructed a wetlands project in 2003 near the Virginia Railway Express in Burke. These wetlands are being created to mitigate for construction impacts from the Roberts Parkway Bridge Overpass and the Springfield Interchange Improvement Project.

VDOT does use bioengineering techniques for transportation projects with associated riparian impacts. Stream restoration on a Pohick Creek tributary near Lorton Road started in the spring of 2004 as a part of VDOT's Richmond Highway widening project. VDOT is assessing other potential stream restoration sites within the State's right-of-way to compensate for stream impacts from road construction projects. VDOT also seeks opportunities to partner with Fairfax County agencies and private property owners on future bioengineering projects. EQAC encourages the Northern Virginia Soil and Water Conservation District and the Department of Public Works and Environmental Services to work with VDOT to identify possible stream restoration projects and to partner with VDOT in the accomplishment the identified projects.

VDOT includes landscaping in several construction projects to enhance road improvements. Fairfax County projects include:

- Ox Road between Burke Lake Road and Davis Drive (completed April 2004 and under a three-year establishment period);
- Fairfax County Parkway between Fawn Ridge Lane and Walnut Branch Road (completed December 2002 and under a three-year establishment period);
- Gambrill Road Park and Ride Lot (construction underway as of June 2004); and
- Richmond Highway widening from Lorton Road to Telegraph Road (construction underway as of June 2004).

VDOT is moving forward with efforts to control invasive vegetation and replace it with vegetation that is more desirable. VDOT contractors are removing invasive vines and trees along several interstate and primary routes in Fairfax County. For the past several years, VDOT removed vines overgrowing native trees and removed non-native invasive trees along the Interstate 66 corridor. In 2003, VDOT planted approximately 1,200 tree saplings, shrubs, and perennials (primary native species) to replace invasive vegetation. VDOT will monitor

these plantings to ensure their successful establishment. EQAC commends VDOT on the invasive plant removal and replacement effort and recommends that VDOT use only native species for replacement plantings.

VDOT maintains about 22 acres of wildflowers and native grasses planted throughout Fairfax County. In April, 2004, VDOT seeded about three acres of wildflowers and native grasses in several infield areas at Interstate 66 and Route 123.

10. Urban Forestry

a. Urban Forestry Division

In 2003, as part of the reorganization of the Land Development Service line of business, the Urban Forestry and East and West Environmental Facilities Review Divisions were scheduled to merge into the newly formed *Environmental and Site Review Division*, effective July, 2004. As part of this reorganization, the Urban Forestry Division (UFD) was renamed to *Urban Forest Management* (UFM). In addition, two sections of UFD, the Urban Forestry Section and Forest Pest Program, were renamed to the *Forest Conservation Section* (FCS) and the *Forest Pest Section* (FPS) respectively. UFM Staffing levels and core activities remained unaffected by this reorganization.

In 2003, Urban Forest Management completed a 5-year Strategic Plan. The strategic planning process included development of UFM Mission, Vision and Value statements. A Leadership Team then developed the following goals to be used to guide the county's urban forestry program over the next five years:

- Goal 1: Develop and implement an urban forest management plan that is ecosystem-based and addresses community values.
- Goal 2: Increase awareness of the value of a healthy urban forest and natural environment and the need for an urban forest program.
- Goal 3: Lead in the development of effective urban forestry policies and regulations.
- Goal 4: Provide the highest quality service for Fairfax County citizens.
- Goal 5: Form strong partnerships to achieve goals of mutual interest in the conservation of the urban forest and natural resources.
- Goal 6: Develop a work culture that fosters our adopted values.

In addition to finalizing a five-year Strategic Plan, in 2003, UFM:

- Identified strategies and resources needed to generate a comprehensive Urban Forest Management Plan.
- Continued mapping regional vegetation resources.
- Continued fulfilling its core responsibility to protect the county's vegetation resources threatened by land development and forest pest activities.

b. Gypsy Moth Program

The gypsy moth was first detected in Fairfax County in 1981. To avoid the environmental, economic, and health hazards associated with this pest, the Board of Supervisors enacted an Integrated Pest Management (IPM) Program to control the gypsy moth. The purpose of the program is to reduce gypsy moth populations below defoliating levels. The goal of the program is to minimize the environmental and economic impacts of the pest by limiting the amount of tree mortality and use of pesticides in the environment. The control methods considered annually are:

- **Mechanical:** the gypsy moth egg mass Search, Scrape, and Destroy Campaign and Burlap Banding for Gypsy Moth Caterpillars. These are citizen involvement programs.
- **Biological:** the release and monitoring of gypsy moth parasites and pathogens.
- **Chemical:** the aerial and ground applications of Diflubenzuron and *Bacillus thuringiensis* (Bt) on high infestations.
- **Educational:** the self-help program and lectures to civic associations and other groups.

In calendar year 2004, gypsy moth caterpillar populations increased compared to previous years. Insect populations are cyclical in nature and it is impossible to determine whether this increase is a sign that outbreak populations are imminent. Although gypsy moth populations have increased, there was no defoliation in Fairfax County or the State of Virginia during the summer of 2004. The gypsy moth staff will continue to monitor populations in the fall of 2004, and ground treatment is probable in 2005.

c. Update on Effort to Control Cankerworm

The fall cankerworm is native to the United States and feeds on a broader range of trees than the gypsy moth. Periodic outbreaks of this pest are common, especially in older declining forest stands. The area of the county that had the most severe infestations of fall cankerworm was in the Mount Vernon and Lee Magisterial Districts. Typically this insect will defoliate in

the early spring when the trees are able to withstand the impacts and little long-term damage is expected; however, tree mortality is possible when combined with conditions that place stress on trees, such as drought. Nuisance to homeowners occurs when large numbers of caterpillars hang from the trees and migrate to the ground.

The Forest Pest Program conducted a large aerial treatment program during the spring of 2003. Staff monitored for adult female moths throughout the Mount Vernon and Lee Districts in January of 2001. The results of the winter 2003 – 2004 monitoring effort indicated that no aerial treatment was required in the spring of 2004.

The Forest Pest Program will monitor for fall cankerworm again this winter. It is expected that populations of this pest will be low in the near future.

d. Emerald Ash Borer

The emerald ash borer (*Agrilus planipennis*) is an exotic beetle from Asia and was discovered infesting ash trees in the state of Michigan in 2002. This beetle is known to attack only ash trees and can kill trees in as little as two years. After it was discovered, the United State Animal Plant Health Inspection Service (APHIS) established a quarantine around the infested area in order to contain the pest. Unfortunately, a tree nursery owner inside of the quarantine area illegally shipped infested ash trees to a nursery in Maryland. During the summer of 2003, 13 of the ash trees were planted at the Colvin Run Elementary School site (Dranesville District). These trees were removed by the Virginia Department of Agriculture and Consumer Services (VDACS) and incinerated.

The removed trees contained evidence that adult beetles had escaped into the environment. In order to prevent the beetles from becoming established in Fairfax County, APHIS and VDACS conducted an Emerald Ash Borer Eradication Program. It was ordered that all ash trees within a one-half mile radius of the school site must be removed and incinerated. This area included a total of 278 ash trees, 90 of which were on 29 privately owned properties. Recognizing that this eradication effort caused residential deforestation to 29 homeowners in Fairfax County, the United States Forest Service is providing \$8,000 that will provide relief to the homeowners in purchasing replacement trees. The Virginia Department of Forestry (VDOF) is administering the federal funds, which will be distributed in the form of vouchers and issued to homeowners by Fairfax County government.

On December 12, 2003, the Commissioner of VDACS added the emerald ash borer to the list of insects that can be controlled by service districts. On January 26, 2004 the Board of Supervisors directed Forest Pest Section staff

to coordinate with VDACS in implementing the Emerald Ash Borer Eradication Program. Staff of the Forest Pest Program (FPP) began assisting VDACS shortly after the insect was added to the list and Board direction was given. FPP duties included surveying the area around Colvin Run Elementary for ash trees, conducting public notification meetings, preparing maps for tree removal contractors, monitoring contracted services, preparing mailings, and responding to media inquiries.

Tree removals began on March 1 and were completed by March 31. Staff is monitoring the area around Colvin Run for the presence of any adult beetles. Monitoring is conducted by placing 50 “sentinel” trees at various areas around the school site. At the end of the summer, the sentinel trees will be removed and checked for life stages of the emerald ash borer.

e. Forest Conservation Section (FCS)

In 2003, the FCS continued to serve its traditional customers: citizens, builders, developers, planners, engineers, landscape architects, private arborists, and other county staff and agencies, including the Board of Supervisors (BOS), Planning Commission, Tree Commission, Environmental and Facilities Review Division (EFRD), Environmental and Facilities Inspections Division (EFID), Department of Planning and Zoning (DPZ), Office of Capital Facilities, and the School Board.

Table VI-2 summarizes the workload of the FCS based on the requests for assistance that were completed for FY 2001, 2002, and 2003. These figures demonstrate the number of requests for assistance has remained fairly constant over the three year period. In FY 2003, requests for assistance were down slightly from previous years for Department of Planning and Zoning (DPZ) requests. In April of 2004, however, the FCS and DPZ agreed to have FCS included in the initial agency routing for all zoning cases. It is anticipated that FCS will be spending a greater percentage of staff time on zoning cases in 2004 and subsequent years.

A significant amount of staff time in 2003 was also dedicated to field research for the vegetative cover study (see below). Ninety additional vegetative plots throughout the county were surveyed in 2003. Staff also participated on the Cluster Subdivision Amendments Team. Revisions to the county’s Cluster Subdivision ordinances were mandated by State legislation. After over a year of work by the Team and numerous public hearings, the Board of Supervisors adopted the Cluster Subdivision Amendments in June, 2004. The Amendments provide for Cluster development by-right in certain zoning districts and situations, and require tree preservation planning and FCS review of by-right Cluster plans.

Staff continued to provide training to new inspectors in EFID on County Code requirements for vegetation preservation and planting, and to teach courses for the Engineers and Surveyors Institute on tree preservation techniques and county tree and landscape ordinances and policies.

Table VI-2 Urban Forest Management Workload 2001 through 2003			
Type of Assignment	Number of Completed Requests		
	2001	2002	2003
Waivers	64	70	67
Zoning Cases	208	187	140
Land Development Services (LDS) Requests: Plan Review	786	723	736
LDS Requests: Site Inspections	725	743	732
Other (BOS, FCPA, Other County Agencies, etc.)	559	611	628
Hazardous Trees	25	27	15
Total Complete	2,367	2,361	2,318

f. Tree Preservation Task Force

The Tree Preservation Task Force met once on December 3, 2003 to conduct an annual review of the status of its recommendations and to discuss the following topics:

- Status of tree preservation legislation submitted by Fairfax County to the 2003 Virginia General Assembly to amend Code of Virginia §15.2-961.
- Review progress of the UFM Strategic Plan and countywide Urban Forest Management Plan.

The Tree Preservation Task Force will continue to meet and review the progress and effectiveness of the 37 recommendations that the Task Force forwarded to the Board of Supervisors in 1999. During 2004, the Tree Preservation Task Force is likely to examine the following issues:

- Cluster Subdivision Zoning Ordinance Amendments;
- The need for State enabling tree preservation legislation; and
- The need for a countywide Urban Forest Management Plan

The Tree Preservation Task Force activities for the year 2003 primarily focused on county staff forming a multi-agency committee (DPZ, DPWES, OCA) to examine new state enabling legislation dealing with by-right processing of cluster subdivisions which directly supports recommendation #4: "Request that DPZ staff bring the proposed cluster subdivision by right Zoning Ordinance Amendment to the Tree Preservation Task Force for discussion prior to the authorization of a public hearing by the Board of Supervisors."

As a result of staff efforts in 2003, on June 7, 2004 the Board of Supervisors adapted proposed amendments that allow for the use of cluster subdivision designs during the development of by-right uses. These amendments became effective on July 1, 2004 and contain provisions that could encourage the preservation of existing trees in levels that substantially exceed that typically found in conventionally designed subdivisions.

In 2003, UFM actively worked on Tree Preservation Task Force Recommendation #37 to "conduct periodic tree and forest cover analysis." This recommendation was addressed by an on-going effort to map the county's tree cover, and will be covered in detail later in this section.

Table VI-3 provides an update of the Tree Preservation Task Force 1999 Recommendations and an Implementation Matrix.

Table VI-3 Tree Preservation Task Force 1999 Recommendations and Implementation Matrix			
REC.#	RECOMMENDATIONS	IMPLEMENTATION MECHANISM	STATUS
1	The Board should reconvene the Tree Preservation Task Force biannually, with additional meetings to be called as needed, but at a minimum annually. (Idea #23)	Board endorsement of recommendations	COMPLETE (ON-GOING)
2	The Tree Commission, as part of their Action Plan, should initiate a campaign for energy conservation through tree planting around houses and other structures for shade and windbreaks. (Idea #25)	Tree Commission's Action Plan and PFM Amendments	<u>COMPLETE</u>
3	As part of the Earth Day/Arbor Day proclamation, the Board should emphasize annually its support for tree preservation as well as planting. (Idea #18)	Board endorsement of recommendation and Earth Day/Arbor Day proclamation	<u>COMPLETE</u>

Table VI-3
Tree Preservation Task Force
1999 Recommendations and Implementation Matrix

REC.#	RECOMMENDATIONS	IMPLEMENTATION MECHANISM	STATUS
4	Request that DPZ staff bring the proposed cluster subdivision by right Zoning Ordinance Amendment to the Tree Preservation Task Force for discussion prior to the authorization of a public hearing by the Board of Supervisors. (Idea #2)	Board endorsement of recommendation	<u>COMPLETE</u>
5	Emphasize the meeting of tree cover requirements through preservation instead of clearing and replanting and request commitments to higher tree cover percentages than the minimum requirements, during the negotiations of zoning applications where appropriate. (Ideas #1, #9)	Board endorsement of recommendation and PFM amendments	COMPLETE
6	Place greater emphasis on connectedness with other EQC areas and wildlife habitat when determining EQC boundaries in the zoning process. (Idea #5)	Board endorsement of recommendation	COMPLETE
7	Require applicants that have submitted zoning applications to show potential stormwater management facility locations on all development plans or plats even if the applicant has applied or will apply for a stormwater management waiver. This recommendation should be part of an overall review of stormwater management policies. (Idea #4)	Board endorsement of recommendation	COMPLETE
8	Request that EQAC incorporate in their annual report to the Board of Supervisors a status of forest cover retention efforts in the county, to include specific watersheds in critical danger. (Ideas #3 and #9)	Memorandum from Urban Forester to EQAC	COMPLETE

**Table VI-3
Tree Preservation Task Force
1999 Recommendations and Implementation Matrix**

REC.#	RECOMMENDATIONS	IMPLEMENTATION MECHANISM	STATUS
9	Seek comments from the Urban Forestry Branch on proposed Plan Amendments. (Idea #8)	Discussion between Director of PD and UFD Director	COMPLETE
10	Request that staff, during the negotiation process of zoning cases, request conservation easements to provide long-term protection for designated tree preservation areas. (Idea #11)	Memo from County Executive to Directors of DPZ and DPWES	COMPLETE
11	Encourage staff to pursue the Zoning Ordinance enforcement process as the avenue for resolution in cases of actual or potential encroachment into common open space areas. (Idea #11)	Memo from County Executive to Directors of DPZ and DPWES	COMPLETE
12	Request that DPWES, VDOT, FCPA and NVRPA conduct research on, and train their staff in, the use of bioengineering techniques. (Idea #13)	1. Memo from Co. Exec. to Directors of DPWES and FCPA 2. Letter from BOS Chair to VDOT and NVRPA	COMPLETE
13	Request that the DPWES, VDOT, FCPA and NVRPA include the use of bioengineering techniques wherever feasible on projects in the county. (Idea #13)	1. Memo from Co. Exec to Directors of DPWES and FCPA 2. Letter from BOS Chair to VDOT and NVRPA	COMPLETE
14	The Board should support future programs for the eradication of invasive and exotic plant species by the Fairfax County Park Authority and other agencies. Encourage the FCPA to investigate alternative funding sources such as grants from the Northern Virginia Planning Commission, the Northern Virginia Soil and Water Conservation District, the Virginia Environmental Endowment and the Virginia Department of Environmental Quality (Idea #26)	Letter from Chair of the BOS to the FCPA	COMPLETE

Table VI-3
Tree Preservation Task Force
1999 Recommendations and Implementation Matrix

REC.#	RECOMMENDATIONS	IMPLEMENTATION MECHANISM	STATUS
15	Request that the Board support funding for an education campaign regarding invasive and exotic plants, to be initiated by the Fairfax County Park Authority in cooperation with the Northern Virginia Regional Park Authority. (Item #26)	Board endorsement of recommendation	COMPLETE
16	The BOS should review and continually re-evaluate its deer policy. (Item #28)	Board endorsement of recommendation	COMPLETE
17	On VDOT projects in Fairfax County the Board should encourage county staff to seek out alternative funding sources such as grant funds for tree and shrub planting and maintenance. (Idea #24)	Memo from County Executive to Fairfax County Department of Transportation	COMPLETE
18	The Board should consider providing cost-sharing funds for tree replacements/landscaping on VDOT projects or initiate county funded planting projects along State roadways in Fairfax County. (Idea #24)	Memo from County Executive to Fairfax County Department of Transportation	COMPLETE
19	The Board should support and encourage citizen and community groups and businesses to initiate planting projects along State roadways and on other public lands in Fairfax County. (Idea #24)	1. Publication of the TPTF recommendations in the Weekly Agenda 2. Consider funding tree planting projects through Fairfax ReLeaf 3. BOS request VDOT to distribute information regarding tree planting process and regulations	COMPLETE COMPLETE COMPLETE
20	The Board should encourage VDOT to provide increased funding for landscape maintenance in Fairfax County as well as encourage county and VDOT staff to seek out alternative sources for maintaining tree and shrub plantings similar to "Adopt-A-Highway." (Idea #24)	1. Letter from the Chair of the BOS to VDOT and State Forester 2. Letter from the Chair of the BOS to VDOT	COMPLETE

**Table VI-3
Tree Preservation Task Force
1999 Recommendations and Implementation Matrix**

REC.#	RECOMMENDATIONS	IMPLEMENTATION MECHANISM	STATUS
21	Involve the private utility companies earlier in the construction process by inviting them to the pre-construction conference required by the Office of Site Development Services prior to commencing construction. (Idea #16)	Letter to Industry	<u>COMPLETE</u>
22	The members of the Industry Small Group of the TPTF should endorse the recommendations of the Task Force which provide incentives for tree preservation. (Ideas#16 and #17)	Board endorsement of recommendation and TPTF endorsement of PFM amendments	COMPLETE
23	Prepare a paper discussing issues related to, and options for adoption of, an ordinance as provided for by the "heritage and specimen" tree conservation enabling legislation. (Resources: staff time) If the enabling legislation is determined to be feasible to implement by county ordinance, have staff prepare an appropriate ordinance for adoption, along with such Zoning Ordinance and Subdivision Ordinance amendments as might be needed. (Resources: staff time; additional two years) (Idea #12)	Report to the TPTF	IN PROGRESS
24	Determine if it is appropriate to reduce the amount of on-site grading that is required to meet drainage requirements, and if so amend the PFM. (Idea #5)	Report to the TPTF	Withdrawn from Infill Recs
25	Evaluate the use of conservation easements on individual lots. Determine the appropriateness of allowing conservation easements on private lots to be counted toward BMP credits. (Ideas #7 and #11)	Report to the TPTF	IN PROGRESS

Table VI-3
Tree Preservation Task Force
1999 Recommendations and Implementation Matrix

REC.#	RECOMMENDATIONS	IMPLEMENTATION MECHANISM	STATUS
26	Amend the PFM and Zoning Ordinance to increase the amount of credit that is given for preserving existing trees and to allow tree cover credit at a reduced rate for seedlings in tree coverage calculations and revise the allowable planting list in the PFM. (Ideas #1, #7 and #9)	ZO and PFM Amendments	IN PROGRESS
27	The Office of the County Attorney should meet with representatives of the State Corporate Commission to discuss tree preservation issues during utility installation in the context of the Chesapeake Bay Preservation Act. (Idea #16)	Meeting with the State Corporate Commission	IN PROGRESS
28	Require evidence that either 1) notice of plan submission to the county has been coordinated with the private utility companies or, 2) the proposed plan submission has been provided to the private utility company. (Idea #16)	Amendment to PFM, S.O., Z.O.	IN PROGRESS
29	Request that DPWES bring their stormwater management pond maintenance policy up for discussion and review to evaluate whether woody and non-woody vegetation is allowed to remain wherever possible. (Idea #14)	Board endorsement of recommendation	IN PROGRESS
30	Produce a brochure that promotes the planting, retention, maintenance and replacement of street and parking lot landscaping trees and mail it to county business owners. Mail brochure to all Chambers of Commerce and distribute through NVBIA. (Idea #20)	Memo from Co. Exec. to Director of DPWES to request production of brochure	IN PROGRESS
31	Request that the Environmental Coordinator provide an analysis of the effectiveness of the current system of using Site Inspectors for enforcement of tree preservation and planting requirements. (Ideas #10, #21)	Report to the TPTF	IN PROGRESS

**Table VI-3
Tree Preservation Task Force
1999 Recommendations and Implementation Matrix**

REC.#	RECOMMENDATIONS	IMPLEMENTATION MECHANISM	STATUS
32	Request that EQAC, as part of their Annual Report on the Environment, provide a status report on the recommendations of the 1995 and 1999 Tree Preservation Task Forces and an evaluation of tree preservation efforts in the county, with recommendations for improvements beyond those included in the Tree Preservation Task Force's recommendations. (Idea #23)	Annual Report on the Environment	IN PROGRESS
33	Amend the Residential Density Criteria and the Environment Section of the Comprehensive Plan to place a greater emphasis on forest cover retention, tree preservation and afforestation such as by adding new criteria that pertain specifically to these issues. (Ideas #3, #5, #7 and #9)	Comprehensive Plan Amendment	COMPLETE
34	Amend the Environment Section of the Comprehensive Plan to incorporate provisions that encourage the use of on-site infiltration techniques that recharge groundwater sources and protect the environment from concentrated run-off; discourage the placement of stormwater management facilities in an EQC unless the pond is regional-serving or the EQC has already been significantly degraded; to place a greater emphasis on the use of regional and off-site stormwater management facilities as opposed to individual on-site ponds; and to state that the preferred design of regional ponds when located in the EQC is either wet, extended dry or embankment-only. (Idea 4)	Comprehensive Plan Amendment	IN PROGRESS

Table VI-3
Tree Preservation Task Force
1999 Recommendations and Implementation Matrix

REC.#	RECOMMENDATIONS	IMPLEMENTATION MECHANISM	STATUS
35	Amend the Planned Development District General and Design Standards in the Zoning Ordinance to place a greater emphasis on forest cover retention and tree preservation such as by adding new standards that pertain specifically to these issues. (Ideas #3, #6 and #9)	ZO Amendment	IN PROGRESS
36	Request that the DPWES allow the use of bioengineering techniques on site and subdivision plans and revise the Public Facilities Manual as necessary to allow for the use of bioengineering techniques. (Idea #13)	Amendment to the PFM	INFILL SW11
37	The Board should support the funding of a periodic tree and forest cover analysis as a routine funding item. It is anticipated that the analysis will be conducted every five years. (Idea #19)	Budget process	<u>Grant proposal</u> IN PROGRESS

g. Tree Commission Activities and Issues in 2003

In 2003, the Tree Commission finalized the construction of the 9-11 Memorial Garden. The Memorial consists of a formal landscaped garden on the grounds of the Fairfax County Government Center.

In addition to participating in numerous public events such as the Fairfax County Earth Day-Arbor Day Celebration and the county's Land Conservation Awards program, Commissioners also provided input on various land use and development proposals affecting trees and landscaping. The Commission continues to support and advocate for the passage of legislation dealing with tree preservation and the use of native and desirable landscape trees during development.

In 2003, the Commissioners continued to utilize their monthly meetings to research and discuss county tree and landscape issues and policy. Various speakers made presentations to the Commission. Urban Forest Management staff provided several presentations on the process of land development, including tree preservation and protection, tree cover requirements, and

landscaping requirements for new developments and for commercial revitalization projects.

h. Summary of Proposed/Anticipated Changes to Tree Preservation Enabling Legislation

In light of the considerable opposition encountered during two consecutive efforts in the 2002 and 2003 Virginia State Legislative Assemblies to amend the tree replacement provisions of § 15.2-961 to include tree preservation requirements, the Board of Supervisors decided not to include a tree preservation proposal in the 2004 Legislative Program.

However, recommendations made by the Tree Preservation Task Force, the New Millennium Occoquan Watershed Task Force, the Tree Commission, and the Environmental Quality Advisory Council, coupled with certainty that the county's efforts to protect air, water, soil and wildlife resources will be extremely difficult without concurrently protecting trees and forest covers, virtually ensures that Fairfax County will continue to seek opportunities to submit and promote tree preservation legislation.

i. Status of grant proposal for satellite mapping of the county's tree cover and analysis of tree cover data

In 2003, Urban Forest Management continued efforts to devise a countywide map for use as a layer on the county's geographic information system that will delineate the distribution of naturally occurring and landscaped vegetation, using the National Vegetation Classification System (NVCS).

In 2003, Urban Forest Management accomplished the following goals towards the mapping and identification of natural vegetation communities that exist in Northern Virginia using the National Vegetation Classification System:

- Cooperated with Fairfax County GIS Office in order to coordinate use of GIS/GPS software and computer equipment;
- Completed data collection in 300 vegetation sample plots;
- Partnered with the Virginia Natural Heritage Program to share vegetation sampling data and information about vegetation communities that exist in Northern Virginia; and
- Acquired 1,656 km² of satellite imagery in summer/fall of 2003.

Once Fairfax County is mapped using the National Vegetation Classification System, a vegetation map will be produced for each of the county's 30 major watersheds. These data should provide a valuable benchmark that can be used to formulate and evaluate the effectiveness of watershed management

and vegetation management policies. It is anticipated that Urban Forest Management will need to continue this mapping effort into 2004 and early 2005.

11. Agricultural and Forestal Districts

Landowners may apply to place their land in special Agricultural and Forestal (A&F) Districts that are taxed at reduced rates. A&F Districts, which are created by the Commonwealth of Virginia, must have 200 or more acres. A&F Districts of local significance, governed by the Fairfax County A&F District ordinance, must have at least 20 acres and must be kept in this status for a minimum of eight years.

Fairfax County's policy is to conserve and protect and to encourage the development and improvement of its important agricultural and forestlands for the production of food and other agricultural and forest products. It is also Fairfax County policy to conserve and protect agricultural and forestlands as valued natural and ecological resources that provide essential open spaces for clean air sheds, watershed protection, wildlife habitat, aesthetic quality, and other environmental purposes. The purpose of the Local Agricultural and Forestal District program is to provide a means by which Fairfax County may protect and enhance agricultural and forest lands of local significance as a viable segment of the Fairfax County economy and as an important economic and environmental resource. All district owners agree to no intensification of the use of their land for the life of the district.

For 2003, there were a total of 42 A&F Districts as shown in Table VI-4.

Table VI-4			
Local and Statewide A&F Districts by Magisterial District (Number)			
Magisterial District	No. of Local Districts	No. of Statewide Districts	Total No. of Districts
Dranesville	18	1	19
Mt. Vernon	3	1	4
Springfield	16	0	16
Sully	3	0	3
Total	40	2	42

Source: *Fairfax County 2003 Agricultural & Forestal District Annual Statistical Report*, Zoning Evaluation Division, Department of Planning and Zoning, Fairfax County, May 15, 2004.

As shown in Table VI-4, all the A&F Districts are in four of the county's nine magisterial districts. Two changes did occur in the number of A&F Districts

between 2002 and 2003. This was the loss of a Statewide A&F District in each of Mt. Vernon and Sully Magisterial Districts.

The first of these was the loss of the Mason Neck District (Mt. Vernon Magisterial District) on January 12, 2003. The majority of the A&F District (about 804 of 945.8 acres) was transferred to the Bureau of Land Management, United States Government. While the transfer actually took place in 2001, the Department of Tax Administration did not remove the district from the program until the district expired on January 12, 2003.

The second of these was the loss of the Stone Bridge District (Sully Magisterial District) on November 15, 2003. The Fairfax County Park Authority acquired the majority of this district (239 of 273 acres) in 2003. The remaining 34 acres under private ownership were removed from the program upon the expiration of the District.

The A&F Districts consisted of 2,811.59 acres at the end of 2003 as shown in Table VI-5.

Table VI-5			
Local and Statewide A&F Districts by Magisterial District (Acreage)			
Magisterial District	Acreage of Local Districts	Acreage of Statewide Districts	Total Acreage
Dranesville	604.55	470.99	1,075.54
Mt. Vernon	188.14	287.65	475.79
Springfield	1,074.74	0	1,074.74
Sully	185.52	0	185.52
Total	2,052.95	758.64	2,811.59

Source: *Fairfax County 2003 Agricultural & Forestal District Annual Statistical Report*, Zoning Evaluation Division, Department of Planning and Zoning, Fairfax County, May 15, 2004.

This is a reduction of 1,219.17 acres due to the expiration of the Mason Neck District and the Stone Bridge District mentioned above.

The Local A&F Districts vary from about 20 acres to about 200 acres. 87.5% of all Local A&F Districts are less than 100 acres; 72.5% are less than 50 acres. Table VI-6 shows the breakdown of the Local A&F Districts by size.

Table VI-6 Local A&F Districts by Size		
Size (Acres)	Number of Districts	Percentage
Less than 25	7	17.5%
25 - 49.99	22	55.0%
50 – 74.99	4	10.0%
75 – 99.99	2	5.0%
100 – 124.99	3	7.5%
125 – 149.99	0	0.0%
150 – 174.99	0	0.0%
175 – 199.99	2	5.0%
200 +	0	0.0%
Total	42	100%

Source: *Fairfax County 2003 Agricultural & Forestal District Annual Statistical Report*, Zoning Evaluation Division, Department of Planning and Zoning, Fairfax County, May 15, 2004.

The two remaining Statewide A&F Districts are Patowmack Farm in Dranesville Magisterial District (470.99 acres) and Belmont Bay Farms in Mt. Vernon Magisterial District (287.65 acres).

12. South Van Dorn Street Phase III Road Project

The U.S. Army Corps of Engineers issued a permit for the construction of South Van Dorn Phase III on May 28, 1996. Conditions contained in the permit required that no construction could start on the roadway until several conditions were completed. Three of these conditions are aimed at protecting Huntley Meadows Park.

One condition is that seven parcels of land (102 acres) adjacent to Huntley Meadows Park must be purchased by Fairfax County. This is in lieu of creating wetlands for the five acres of wetlands that will be destroyed in road construction. These 102 acres contain about 69 acres of wetlands and 33 acres of uplands. This action will ensure preservation of the wetlands contained in this 102-acre tract and will provide a valuable addition to Huntley Meadows Park.

The county now has possession of these seven parcels of land, which will be turned over the FCPA to become part of Huntley Meadows Park. The Corps also required that this land remain natural (as is the rest of Huntley Meadows Park).

Another condition by the Corps required stormwater management improvements on eight ponds in and around Greendale Golf Course. The last pond, at the intersection of South Van Dorn Street and King Centre Drive, was completed in June, 2002.

A third condition by the Corps required that Fairfax County submit a Monitoring and Maintenance Plan for these stormwater improvements. The plan details the monitoring and maintenance requirements for a ten-year period. The Corps approved the plan in October, 2001. The monitoring station was installed in July, 2002.

With the completion of all the conditions imposed by the Corps, construction of the extension of South Van Dorn Street to Telegraph Road started in September, 2002. Fairfax County is providing full-time inspection of the erosion and sediment control measures during construction. Clearing and initial grading operations were completed when rain and winter conditions halted construction. Heavy rains in spring and summer, 2003 further delayed the work. Construction did start up again in fall, 2003 with rough grading operations. Completion is now estimated by the end of 2004.

C. RECOMMENDATIONS

1. EQAC recommends that the county Board of Supervisors develop and implement a countywide Natural Resource Management Plan – an ecological resources management plan that can be implemented through the policy and administrative branches of the county government structure. Two necessary tasks should be accomplished first -- prepare and adopt a unified Natural Resource Conservation Policy, and complete a countywide Baseline Natural Resource Inventory. This is a continuing recommendation from past years. EQAC notes that slow progress is being made in this area due to efforts by the Fairfax County Park Authority staff in their efforts to establish a natural resources baseline inventory. The FCPA has developed a countywide Green Infrastructure Map that appears a basis for a Natural Resource Inventory. Additionally, the Urban Forestry Division is continuing efforts to devise a countywide map for use as a layer on the county's GIS that will delineate the distribution of naturally occurring and landscaped vegetation. However, these efforts must be supplemented by an inventory of the county that accounts for flora and fauna. The Park Authority has now prepared a Natural Resources Plan for management of the county's parks. EQAC fully supports these efforts, urging that they culminate in a countywide Resource Management Plan. EQAC also notes the accomplishment of the Park Authority in preparing and publishing a Natural Resources Plan for management of the county's parks and urges the Park Authority to fully implement this plan. This is a continuing

recommendation for past EQAC reports. EQAC's intent is that Fairfax County should have all the tools in place (the policy and the data) to create a plan that will support the active management and conservation of the county's natural resources.

2. In past Annual Reports, EQAC recommended that the county Board of Supervisors emphasize public-private partnerships that use private actions such as purchase of land and easement by existing or new land trusts to protect forests and other natural resources, including champion/historic trees. With the signing of a Memorandum of Understanding (MOU) between the Board of Supervisors and the Northern Virginia Conservation Trust, such a public-private partnership came into being. Thus, EQAC's recommendation has been satisfied. EQAC continues to commend the Board of Supervisors for this action and recommends continued support for this partnership. EQAC notes that the MOU is for a three-year period and therefore recommends continuing this MOU past the initial three years.
3. In reaction to the limited tree preservation authority provided by the County Code, and recommendations by the Tree Preservation Task Force, Fairfax County initiated a proposal to amend the Virginia State Code § 15.2-96 1, as part of its 2002 strong emphasis on tree preservation. Two bills were introduced in the 2002 Virginia State Legislative Assembly, but were tabled until the 2003 session due to opposition by the Virginia Building Association. However, this proposal lost its active status in early 2003. While components of the proposed language survived in other legislative proposals adopted by the Virginia General Assembly in 2003, the newly adopted language is primarily focused on tree replacement. EQAC recommends that the Board of Supervisors continue to support the proposals to amend the Virginia State Code § 15.2-961 by placing greater emphasis on preservation of existing trees.
4. Fairfax County no longer has Soil Scientist expertise on the county Staff. EQAC has in the past recommended that the Board of Supervisors reestablish this expertise. The Board of Supervisors did not establish staff positions in response to this EQAC recommendation; however, they did provide funding to the Northern Soil and Water Conservation District (NVSWCD) for mapping of the county's soils. This enabled NVSWCD to provide the needed expertise. There is, however, a continuing need for this expertise in the county. The recent incident on Telegraph Road, where a hillside slid into Telegraph Road and endangered homes at the crest of the hill, points out the soils problems that exist in the county. The increasing urbanization of the county has created new types of soils – urban man-made soils. These soils can have different characteristics in water infiltration and erosion. Therefore, as various projects are started in these soils, including stream restoration and other water control measures, expertise in these soils

are needed in the county. At present, the only place this expertise exists is in NVSWCD. EQAC therefore recommends that the Board of Supervisors continue the agreement with NVSWCD to provide soil scientist expertise.

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